



Organizational Role Stress among Health Science Faculty Members of Kathmandu, Nepal

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Authors' contributions

This work was carried out in collaboration between all authors. Author RP designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors RCPY and AP managed the analyses of the study. Author AP managed the literature searches, designed the study, performed the statistical analysis, wrote the protocol and wrote the final manuscript. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJMAH/2017/35104

Editor(s):

(1) Giuseppe Murdaca, Clinical Immunology Unit, Department of Internal Medicine, University of Genoa, Italy.

Reviewers:

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Complete Peer review History: <http://www.sciencedomain.org/review-history/20284>

Original Research Article

Received 27th June 2017
Accepted 17th July 2017
Published 31st July 2017

ABSTRACT

Background: Stress is a problem of high teacher turn-out, brain drain, massive alcohol consumption, and high morbidity and mortality rates in the recent years. The main objective of this research is to find out the organizational reasons of being stress among health science faculty members.

Methods: A total of 290 faculty members were selected using the method of simple random sampling from the list of faculty members. A self-administrated questionnaire comprised of organizational role stress scale was used to examine the stressors the participants.

Results: There was significant relationship between organizational stress and stress related to linkage for example role stagnation, role erosion, role expectation/coordination and inter-role distance.

Conclusion: Faculty members were found to be stressed in their roles. Stagnant role was the main contributor in the high stress level among the faculty members.

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Keywords: Faculty members; role stress; Nepal.

1. INTRODUCTION

Stress is defined as the physical, mental, or emotional reaction resulting from an individual's response to environmental tensions, conflicts, pressures, and other stimuli" [1]. Stress is an important part of our lives [2]. Stress is an outcome from inconsistencies between demands and pressures on the person, on one hand then their knowledge and abilities on the other, which challenges their ability to cope [3]. Faculty members occupation is no merely the hard work among faculty; even though it is becoming a highly stressful, low motivated profession [4]. High turnover rate, absenteeism, job searching in the official time are the most common problems seen among the faculty members [5]. Researcher, faculty member, social worker, and personnel manager all the profession use the word stress in their own way which can be beneficial or negative effects [6]. Now a day's stress becoming a major contributor to low employee morale, Conflict, high accident, quarrel, absenteeism, brain drain and turnover rates [5,7]. The cost both economical and physical of above contributors of stress has become a huge burden on many stakeholders and organization too [8]. Usually faculty members are more worried about the outcome of their work that can even affect the way they treat the management of health sciences college, students and guardians and the colleagues too [9]. In Nepal, there is little or no relevant research and data to reveal the existence and extent of occupational stress among faculty members of health Sciences College. The alone or combination of long working hours, lack of social recognition, role ambiguity, insufficient pay, poor teaching facilities, poor organizational climate, strained relationship with colleagues are found as the causes for stressfulness among faculty members [4]. There is also a problem of high teacher turn-out, Brain drain, massive alcohol consumption, high morbidity and mortality rates in the recent years [8].

Many studies reported that faculty members experienced a high level of stress than other occupations. Occupation is the important parts of our daily lives which cause a great deal of stress. Fewer studies have been conducted on the actual stress management and coping mechanism strategies used to manage the potential stressors in their lives of faculty members. It will help establish facts about the

existence and severity of stress among faculty members of health sciences colleges of Nepal. As far from this study, its information was of value to the government policymakers, education providers, and other stakeholders who will work towards devising intervention strategies in order to alleviate stress levels, reduce absenteeism, reduce brain drain among faculty members of health sciences colleges [4]. The number of health sciences college of Nepal has increased tremendously for the past few years [10]. Due to the increasing number of health sciences, college faculty may face more problems in their job as the managements are facing competitive pressure from other collages [11]. Due to management pressure and other organizational factors faculty members face plenty of stress that affects their satisfaction and even their physical or mental health [11]. The study is designed to investigate levels of work stress on faculty members of health Sciences College, nature of work, and coping mechanism of university faculty members. It was helpful to the baseline study and situation of coping strategies like better tolerate, taking direct action through problem solving, conflict resolution, meditation, planning and decision-making and physical exercise or meditation needed to overcome the stress. The main objective of this research is to find out the organizational reasons to being stress among faculty members including the basic socio-demographic information and lifestyle of faculty members.

2. METHODS AND MATERIALS

Cross sectional study was conducted among the different bachelor's and master's level health sciences colleges of Kathmandu Valley in Nepal. There are 31 registered health sciences college in Kathmandu valley. Among them, 8 college are from Tribhuvan University (TU), 15 are from Purwanchal University (PU), 3 are from Pokhara University (PU) 4 are from Kathmandu University (KU) only 1 from Patan Academy of Health Sciences (PAHS) and 1 from National Academy of Medical Sciences (NAMS). Therefore, a ratio of 4:8:2:2:1:1 ((TU), (PU), (PU), (KU), (PAHS) and NAMS) was used for this study. In second stage, each of the health sciences college was further segregated into different faculty to select participants to be recruited into the study. Master's degree i.e. MPH, MN, MSc Nursing, MD, MCH, M Pharma, MDS and Bachelor's degree i.e. BPH, B Pharma, B.Sc. Nursing, BN,

MBBS, BMLT, BDS, B ophthalmology, B Radiology and in the third stage, A total of 290 faculty members from each faculty was selected by simple random (Lottery) using the list of faculty members. A self-administrated questionnaire (SAQs) comprised of organizational role stress i.e. (ORS) scale to examine the four role stressors as major contributors of stress in participants. The “ORS” Scale measures the above four types of role stresses. It is a psychometric instrument. ORS is a four point scale (0 to 4) containing five items for each of the ten role stresses and a total of 50 statements. Thus the total scores on each role stress ranges from 0 to 20. Responses are to be given on an answer sheet. The “ORS” scale was obtained from a book [12]. The purpose of the article is to find out the stress factor among faculty member in Kathmandu, Nepal. The ethical approval was taken from institutional ethical review board, Om Parkash Jogender Singh University and informed consent was taken from respective respondents before interviewing the respondents.

2.1 Scoring Procedure

The score sheet was used for scoring. To get the total scores for each role stress the ratings given by each respondent were totaled horizontally (for 5 items) these scores was categorized into three levels of role stresses namely low, median and high. Based on median and quartile deviations, the standard norms was suggested for low, median and high levels of the five role stresses by PareekUdai (1982a) and Khanna (1986) for managers. Data collected was handled properly and stored in soft and hard copies. Appropriate statistical software was used for inferential statistics, descriptive statistics, was used to

analyze the data. Principal Component Analysis was used among reliability tested 14 scale. The high score means they were more stressed.

3. RESULTS

3.1 Socio-demographic Information of the Participants

More than half (57.6%) of the participants were male and (42.4%) of them were female. Almost three-fourth of the participants belonged to young age group and one-fourth belonged to middle age group. The mean age of male group was more than the female group. Similarly, more than three fourth (61.7%) of the participants were married. (Table 1)

3.1.1 Reliability testing

Cronbach's Alpha score was 0.845 in 25 scales of ORS. After testing the reliability, 14 scale Cronbach's Alpha value 0.878 were found.

3.2 Principal Component Analysis for Reliability Tested 14 Items of ORS - Scale

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy test shows the significant association p-value (<0.001) and the Kaiser-Meyer-Olkin value 0.696 with the Chi-Square value 2.524. The four PCA component i.e. role stagnation, role erosion, role expectation/coordination and inter-role distance of ORS covers 72.58 percent of the total scales. (Table 4)

3.3 Scoring between the PCA Component

The PCA component value shows the significant association p<0.001. (Table 5)

Table 1. Distribution of participants by gender and age

Variables	Male N = 167		Female N= 123		Total N = 290	
	F	%	F	%	F	%
Age Groups (Years)						
Less than 30 years	56	19.3	32	11.0	88	30.3
30-39	78	26.9	70	24.1	148	51.0
40-49	27	9.3	16	5.5	43	14.8
50-59	0	0.0	5	1.7	5	1.7
Above than 60	6	2.1	0	0.0	6	2.1
Total	167	57.6	123	42.4	290	100.0
Marital status						
Single	63	21.7	48	16.6	111	38.3
Married	104	35.9	75	25.9	179	61.7
Total	167	57.6	123	42.4	290	100.0

Table 2. ORS scale

	N	Mean	Std. Deviation	t-value	p-value	Confident Interval	
						Lower	Upper
My role tends to interfere with my family life	290	1.66	1.37	20.55	0.00	1.49	1.81
I am afraid i am not learning enough in my present role for taking up higher responsibility	290	1.29	1.12	19.48	0.00	1.16	1.42
I am not able to satisfy the conflicting demands of various people above me	290	1.79	1.31	23.31	0.00	1.64	1.94
My role has recently been reduce in importance	290	1.67	1.23	23.08	0.00	1.52	1.81
My work load is too heavy	290	2.00	1.13	30.09	0.00	1.87	2.13
Other role occupants do not give enough attention and time to my role	290	1.70	1.29	22.44	0.00	1.55	1.85
I do not have adequate knowledge to handle the responsibilities in my rule.	290	0.88	1.40	10.69	0.00	0.72	1.04
I have to do things in my role that are against my better judgment.	290	1.42	0.92	26.19	0.00	1.31	1.53
I have not clear on the scope and responsibilities of my role (job)	290	1.03	1.27	13.82	0.00	0.89	1.18
I do not get the information needed to carry out responsibilities assigned to me	290	1.19	0.97	21.05	0.00	1.08	1.30
I have various other interests (social, religious etc) which remains neglected because i do not time to attend to these.	290	2.47	1.28	32.87	0.00	2.32	2.62
I am too preoccupied with my present rule responsibilities to be able to prepare for taking up higher responsibilities	290	1.54	1.08	24.21	0.00	1.41	1.66
I am not able to satisfy the conflicting demands of my peers and juniors	290	1.80	1.35	22.68	0.00	1.65	1.96
Many functions that should be a part of my rule has been assigned to some other role.	290	1.90	1.18	27.58	0.00	1.77	2.04
The amount of work i have to do interferes with the quality i want to maintain	290	2.00	1.11	30.78	0.00	1.88	2.13
There is not enough interaction between my role and other's roles.	290	1.40	1.08	22.12	0.00	1.28	1.52
I wish i had more skill to handle the responsibilities of my role.	290	1.78	1.40	21.69	0.00	1.62	1.94
I am not able to use my training and expertise in my role	290	1.33	1.18	19.26	0.00	1.20	1.47
I do not know what the people i work with expect of me.	290	1.54	1.29	20.28	0.00	1.39	1.69
I do not get enough resources to be effective in my role	290	1.89	1.31	24.44	0.00	1.73	2.04
My role does not allow me enough time for my family.	290	1.82	1.12	27.83	0.00	1.70	1.95
I do not have time and opportunities to prepare myself for the future challenges of my role.	290	1.66	1.22	23.12	0.00	1.51	1.80
I am not able to satisfy the demands of clients and others since these are conflicting with one another	290	1.74	1.12	26.58	0.00	1.61	1.87
I would like to take on more responsibility than i am handling at present	290	2.03	1.20	28.73	0.00	1.89	2.17
I have been given too much responsibility	290	1.50	1.19	21.43	0.00	1.37	1.64

Table 3. Reliability test

Scale	Cronbach's alpha
My role tends to interfere with my family life	0.875
I am not able to satisfy the conflicting demands of various people above me	0.869
My role has recently been reduce in importance	0.862
My work load is too heavy	0.873
Other role occupants do not give enough attention and time to my role	0.865
Many functions that should be a part of my rule have been assigned to some other role.	0.864
The amount of work have to do interferes with the quality I want to maintain	0.870
There is not enough interaction between my role and other's roles.	0.871
I am not able to use my training and expertise in my role	0.872
I do not know what the people I work with expect of me.	0.870
I do not get enough resources to be effective in my role	0.868
My role does not allow me enough time for my family.	0.871
I don't have time and opportunities to prepare myself for the future challenges of my role.	0.872
I am not able to satisfy the demands of clients and others since these are conflicting with one another	0.875

Table 4. PCA on the component of ORS

SN	PCA on the component of ORS	Component values
A	Role Stagnation	
1	My role has recently been reduce in importance	0.637
2	My work load is too heavy	0.794
3	Other role occupants do not give enough attention and time to my role	0.601
4	Many functions that should be a part of my rule have been assigned to some other role.	0.851
5	The amount of work i have to do interferes with the quality I want to maintain	0.648
B	Role erosion	
1	I do not know what the people I work with expect of me.	0.687
2	I do not get enough resources to be effective in my role	0.8
3	My role does not allow me enough time for my family.	0.78
4	I do not have time and opportunities to prepare myself for the future challenges of my role.	0.781
C	Role expectation/coordination	
1	There is not enough interaction between my role and other's roles.	0.586
2	I am not able to use my training and expertise in my role	0.819
3	I am not able to satisfy the demands of clients and others since these are conflicting with one another	0.726
D	Inter-role distance	
1	My role tends to interfere with my family life	0.898
2	I am not able to satisfy the conflicting demands of various people above me	0.787

Table 5. Scoring between the PCA component

PCA	N	Mean	Std. deviation	t	Mean difference	Lower	Upper
Role stagnation	290	9.2586	4.38052	35.993	9.25862	8.7523	9.7649
Role erosion	290	6.9069	4.00108	29.397	6.90690	6.4445	7.3693
Role expectation/coordination	290	4.4724	2.68552	28.360	4.47241	4.1620	4.7828
Inter-role distance	290	3.4586	2.04110	28.856	3.45862	3.2227	3.6945

*95% Confidence Interval of the Difference, $p < 0.001$

4. DISCUSSION AND CONCLUSION

Researchers have focused more attention on the issues of the stress among the faculty members

of Nepal. Majority of these researchers have reported similar findings among them [12]. Study finding from the other researcher shows that some level of dissatisfaction is prevalent among

the different profession like physician, dentist, nurses, etc. They also opined that occupational pressure might have adverse effect upon a workers attitude and well being which may lead to poor job satisfaction.

The results of the present study revealed that there was significant relationship between organizational stress and stress related to linkage for example role stagnation, role erosion, role expectation/coordination and inter-role distance. It reveals that stress level and associated factors differ according to the factor. Stagnant role of the faculty members is the higher stress level among the faculty members. Efficacious interventions are needed to identify causes and consequences of organizational role stress so that these professionals can effectively contribute to the growth of the organization and have a better quality of life. These researches were limited in Kathmandu valley only, further national level research is urgent to identify the prevalence of stress among faculty members of nation.

CONSENT

As per international standard or university standard, patient's written consent has been collected and preserved by the authors.

ETHICAL APPROVAL

As per international standard or university standard, written approval of Ethics committee has been collected and preserved by the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Smith KL. Coping mechanisms and level of occupational stress among agriculture teachers and other teaching populations; 2012.
2. Maharjan Om PA. Causes of male re-canalisation (vasovasostomy (reversal surgery)) in vasectomy client in Nepal. *Int J Interdiscip Multidiscip Stud.* 2014;1(7):126–33.
3. Mukosolu O, Ibrahim F, Rampal L, Ibrahim N. Prevalence of job stress and its associated factors among Universiti Putra Malaysia staff. *Malaysian J Med Heal Sci.* 2015;11(1):27–38.
4. Sabherwal N, Ahuja D, George M, Handa A. A study on occupational stress among faculty members in Higher Education Institutions in Pune *Review of Literature.* 2015;(1):18–23.
5. Gupta V, Rao E, Mukherjee R. Occupational stress amongst faculty members: A review of literature. *Int J Res Dev.* 2015;4(2):18–27.
6. Chaudhry AQ. Analysis of occupational stress of university faculty to improve the quality of their work. (1) Introduction. 2013;9(1).
7. Muto S, Muto T, Seo A, Yoshida T, Taoda K, Watanabe M. Job stressors and job stress among teachers engaged in nursing activity. *Ind Health.* 2007;45(1):44–8.
8. Archibong IA, Bassey AO, Effiom DO. Occupational stress sources among university academic staff. *Eur J Educ Stud [Internet].* 2010;2(3):217–25. Available:http://ozelacademy.com/EJES_v2n3_5.pdf
9. Parveen M. Faculty stress in a Saudi Government University. 2013;3(18):180–92.
10. Kayastha DP, Kayastha R. A study of job satisfaction among teachers. *Higher Secondary School of Nepal.* 2012;1(1):52–62.
11. Tuladhar H, Khanal R, Kayastha S, Shrestha P, Giri A. Complications of home delivery: Our experience at Nepal medical college teaching hospital. *Nepal Med Coll J.* 2009;11(3):164–9.
12. Khanna S, Distance I, Stagnation R, Expectation R. Organisational role stress (ORS) and life satisfaction among female doctors. 2015;601–6.

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Peer-review history:
The peer review history for this paper can be accessed here:
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